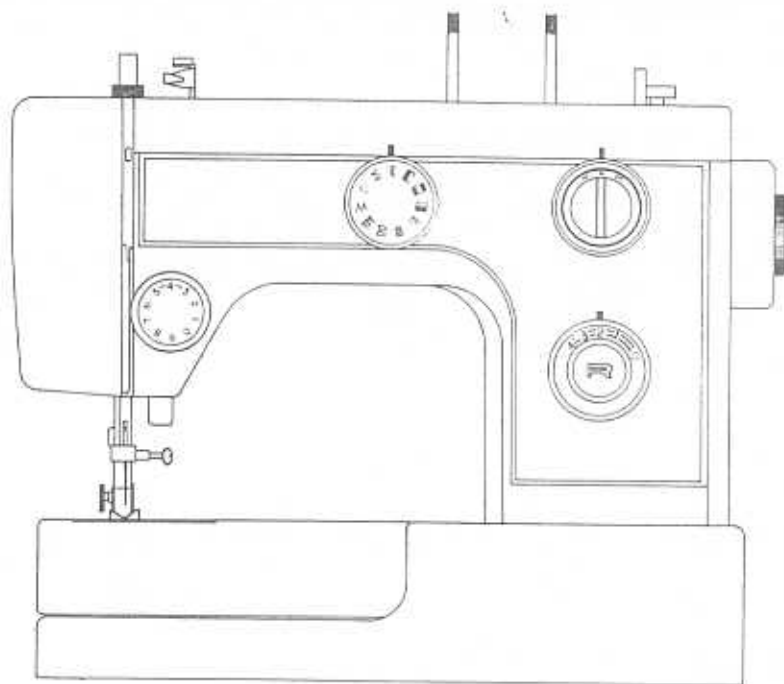


RICCAR

INSTRUCTION BOOK



**FREE ARM
MODEL-1900
SEWING MACHINE**

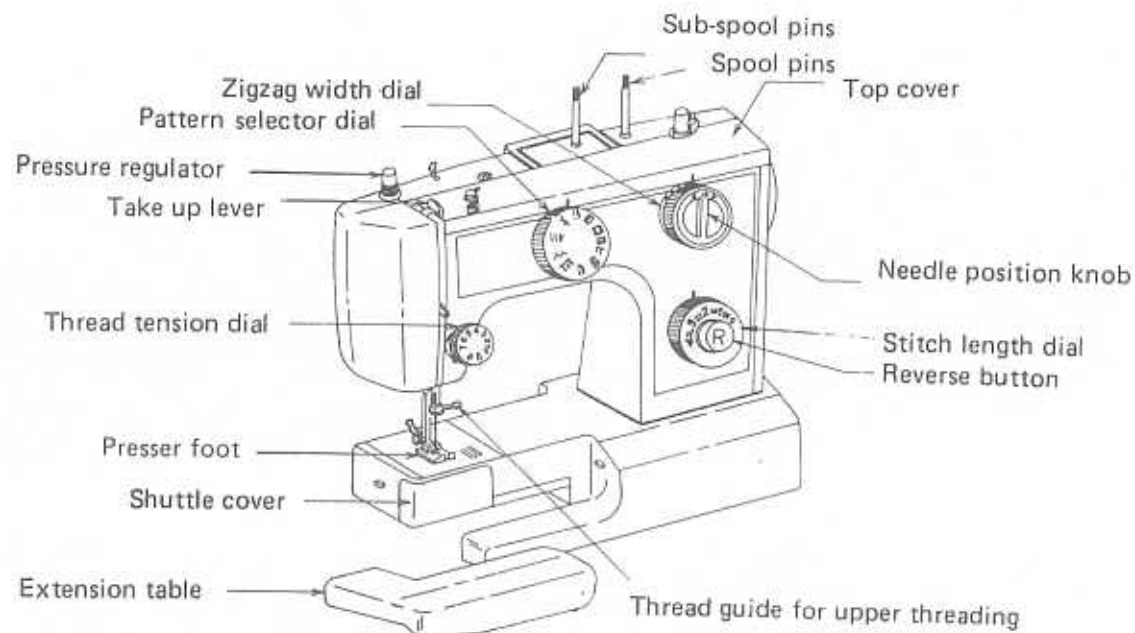
IBR 1900

CONTENTS

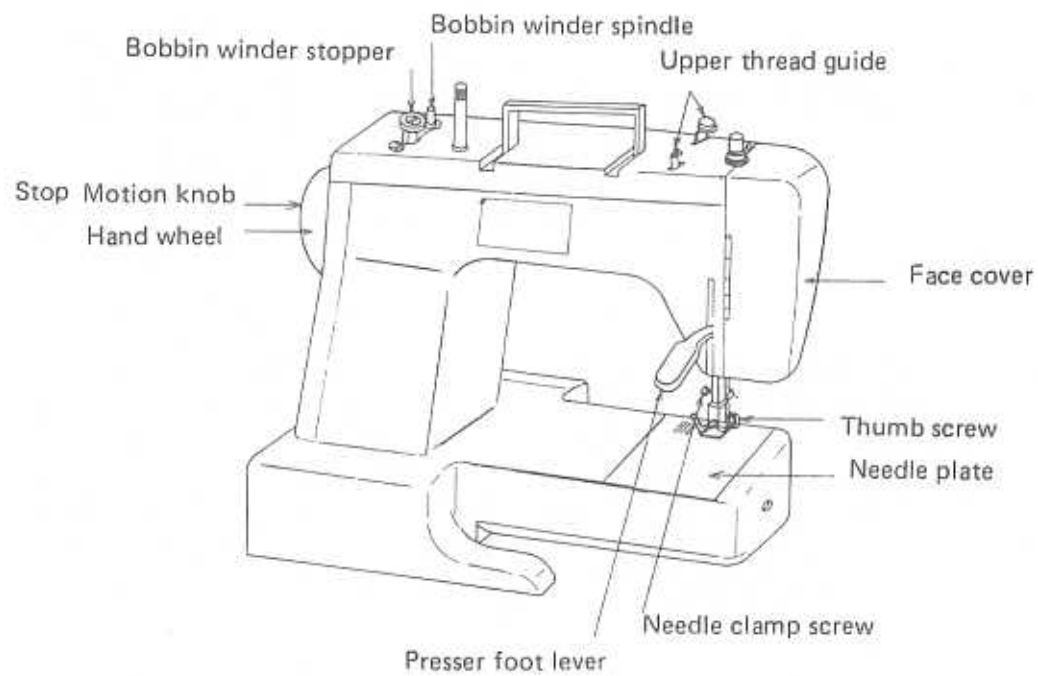
Name of Parts	1 & 2
Accessories.	3
Before sewing (Power supply and Sewing lamp).	4
Take out extension table, free arm sewing	5
Winding the bobbin	6
Removing bobbin case and bobbin	7
Inserting bobbin into bobbin case.	7
Inserting bobbin case into shuttle race.	8
Threading upper thread & Twin needle threading.	9
Drawing up bobbin thread.	10
Changing sewing directions	10
Control dial & Adjusting thread tension.	11 & 12
Regulating the presser foot pressure	13
Drop feed	13
Changing needle	14
Fabric, Thread, Needle table	15
Sewing (pattern selector) and operation table	16
To start sewing	17
To finish seam	18

Straight stitch	19
Zigzag sewing	19
Overcasting	20
Stretch stitch	20
Blind stitch	21 & 22
Button sewing	23
Binding	23
Zipper sewing	24
Button hole sewing	25
Hemming	26
Twin Needle	27
Embroidery	27
Quilter	28
Seam guide	28
Maintenance (Cleaning and oiling)	29
Checking Performance Problems WHAT TO DO	30

NAME OF PARTS (FRONT VIEW)



(REAR VIEW)



ACCESSORIES



Bobbin



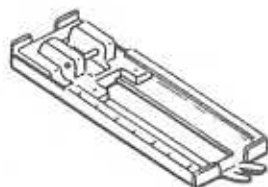
Felt



Zipper foot



Zigzag foot
(On machine)



Button hole foot



Button foot



Seam guide



Quilter



Hem guide



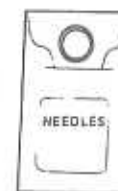
Button hole cutter



Machine Oil

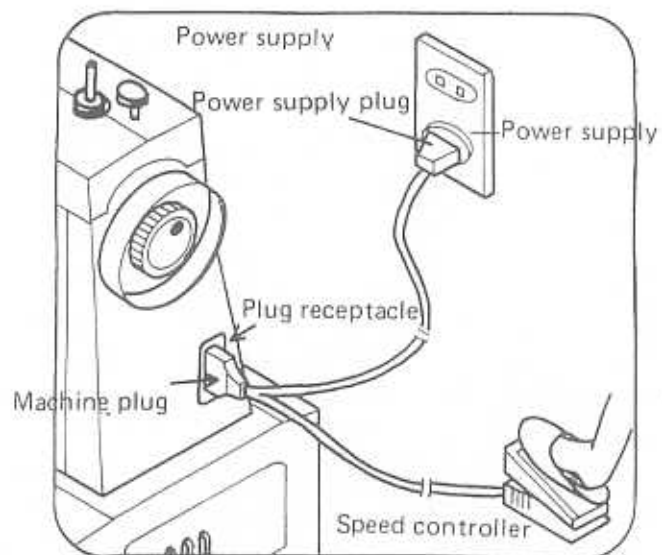


Screw driver
(Large & small)

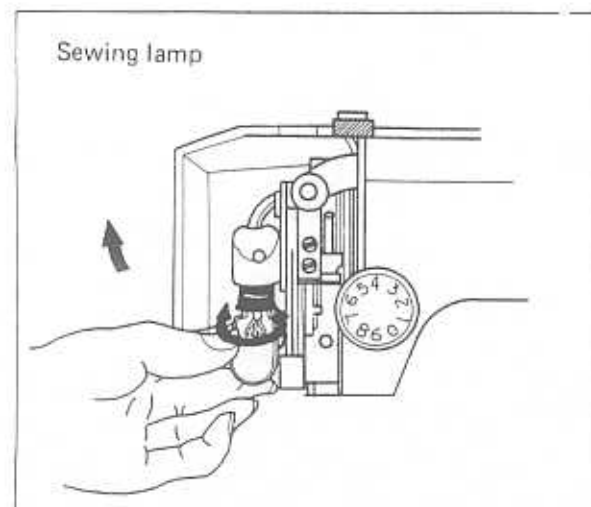


Needle
11 # 14

BEFORE SEWING

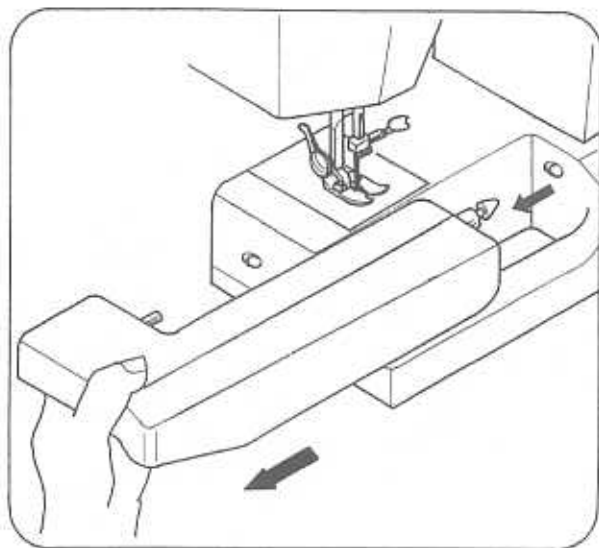


1. Fit the machine plug into the machine.
2. Plug the machine to the power supply.
3. Sewing speed can be varied by the speed controller.



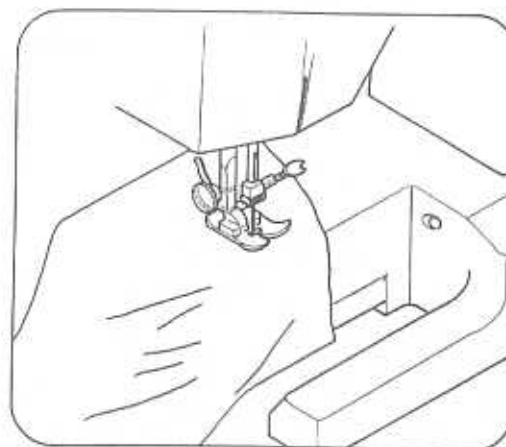
1. Remove or install bulb from inside of face cover.
2. Open face cover in direction of arrow.
3. Remove bulb by unscrewing it in counter clockwise.
4. Install a new bulb by screwing it in clockwise.
5. Use a screw type bulb with 120V/15W, (Max)

REMOVING EXTENSION TABLE



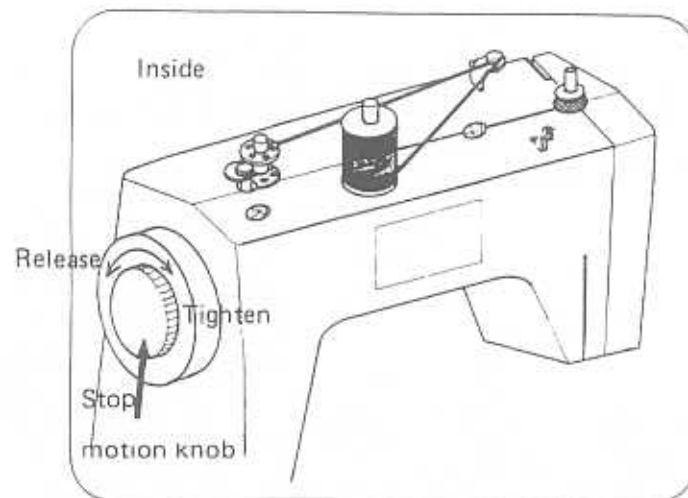
1. Hold the left end of table and pull out easily in direction of arrow.

FREE-ARM SEWING

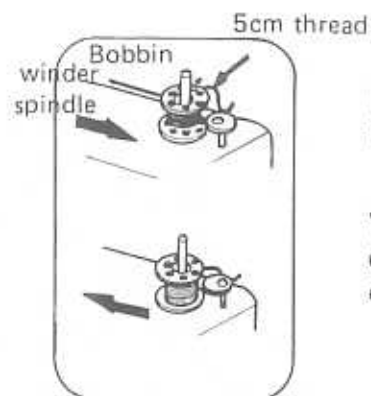


1. Especially useful when sewing sleeves, pants leg, tubular fabrics etc more easily.
2. To sew tubular just slip the sleeve or pants leg on the free arm as shown above.
3. This sewing machine can be used as a flat bed machine, but easily converts to free arm machine by removing the extension table.

WINDING THE BOBBIN

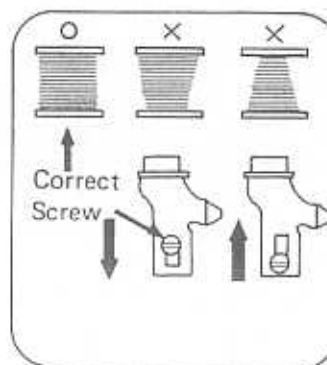


1. Release stop motion knob.
2. Thread as shown.
3. When bobbin is filled, tighten stop motion knob.



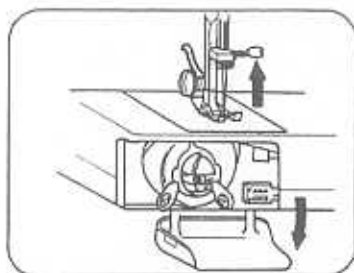
Push bobbin winder spindle in direction of arrow.

When bobbin winding is completed return spindle to original position.



When bobbin winding is incorrect, release the screw of upper thread guide and adjust up or down until bobbin winding is balanced.

REMOVING BOBBIN CASE AND BOBBIN



1. Raise needle to its highest position and open the shuttle race cover.

Hinged latch

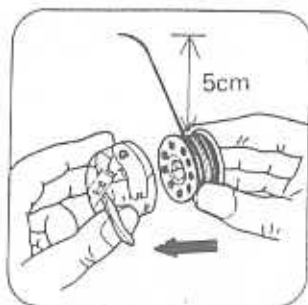


2. Open hinged latch of bobbin case and pull bobbin case out of machine.

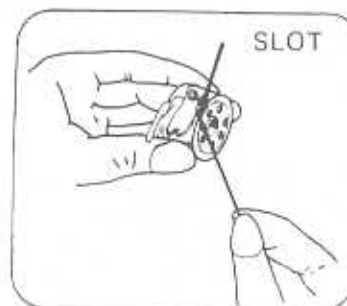


3. Release the latch and bobbin will fall out easily.

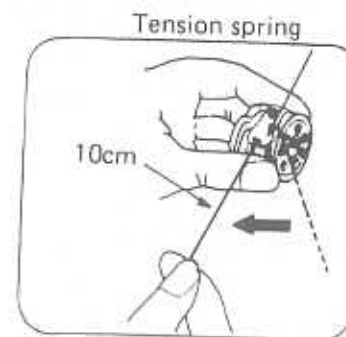
INSERTING BOBBIN INTO BOBBIN CASE



1. Pull off 5cm of thread from bobbin and insert it into bobbin case as shown.

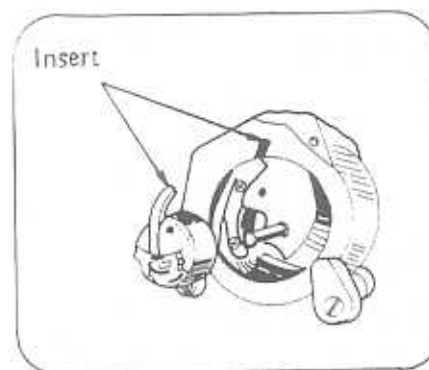
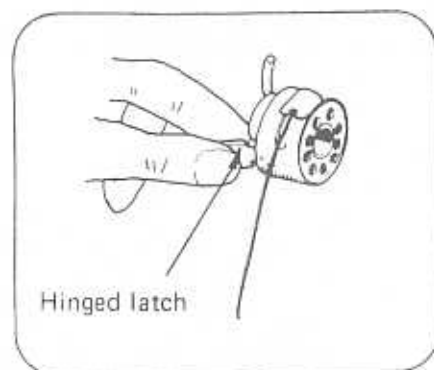


2. Guide the end of thread into slot.



3. Pull thread through under tension spring and draw about 10cm of thread.

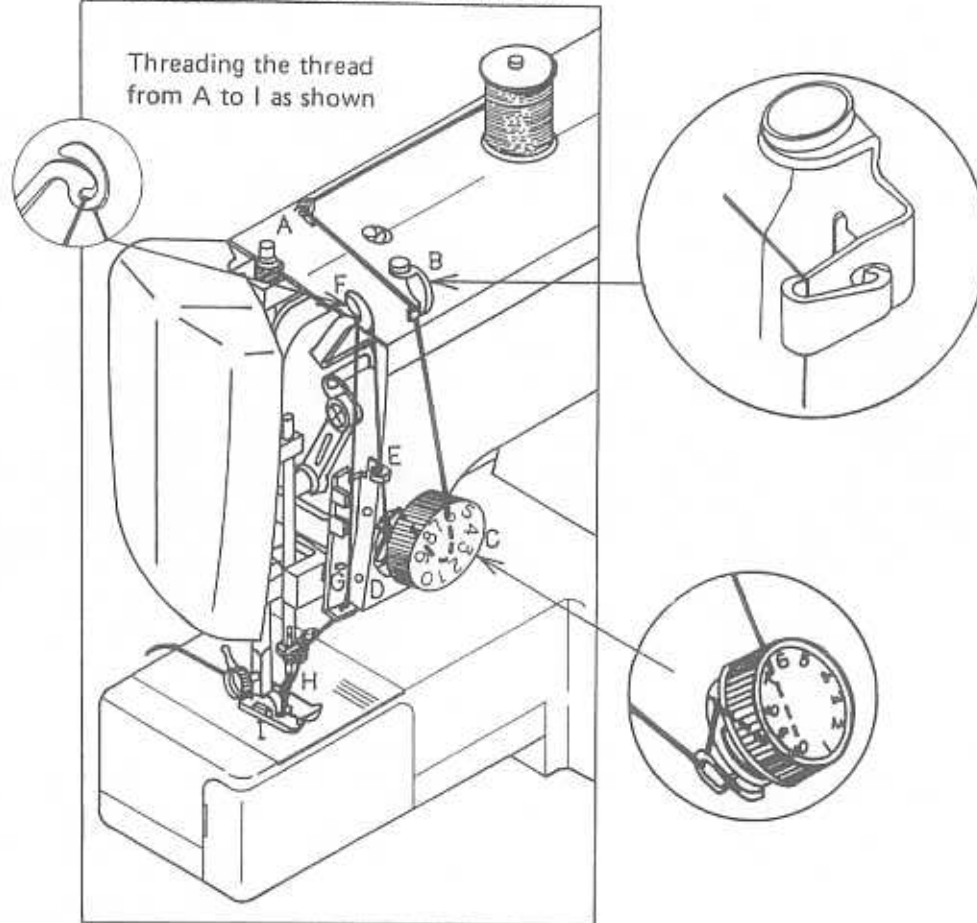
INSERTING BOBBIN CASE INTO SHUTTLE RACE



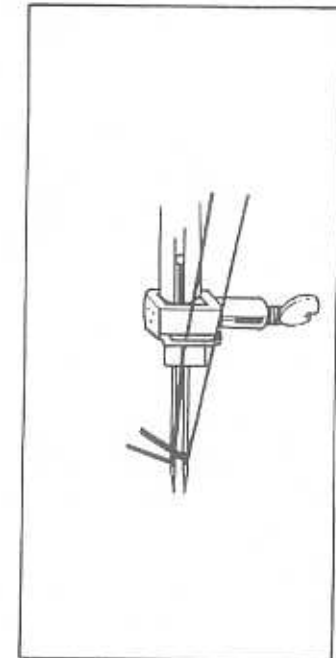
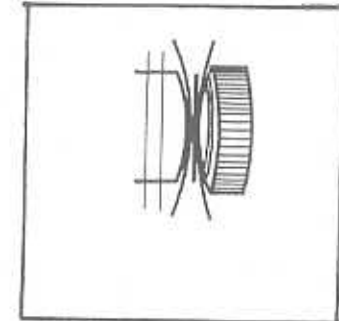
1. Raise needle to its highest position, pulling thread to the front, open the latch of bobbin case and hold it.
2. Holding latch open, place bobbin case onto centre pin in shuttle and release latch

THREADING UPPER THREAD

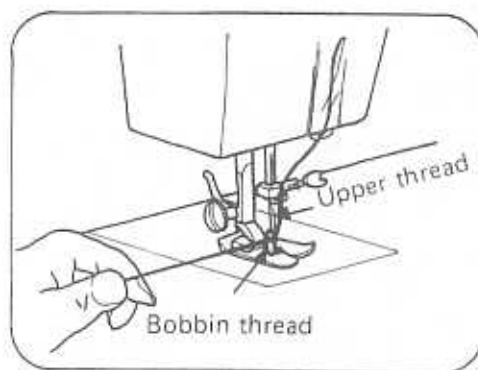
Threading the thread from A to I as shown



Twin needle threading

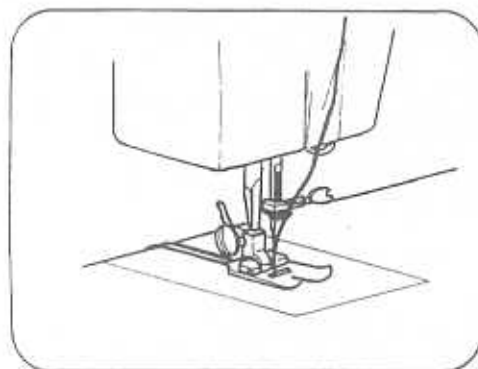


DRAWING UP BOBBIN THREAD



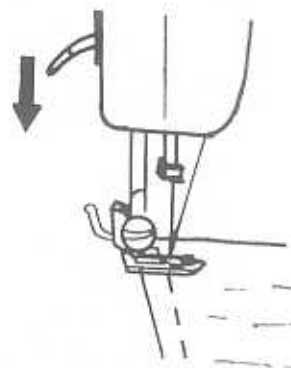
1. Hold upper thread with left hand, turn the hand wheel slowly towards you until the needle goes down and comes up. Then stop the hand wheel when the take-up lever is at its highest position.

Lightly draw up the upper thread and bobbin thread will be brought up in a loop.

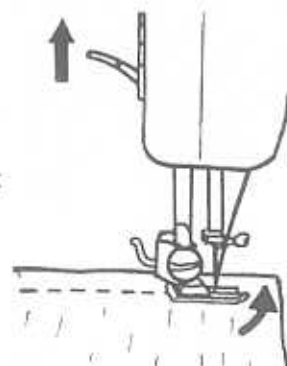


2. Put down presser foot and start to sew.

CHANGING SEWING DIRECTIONS

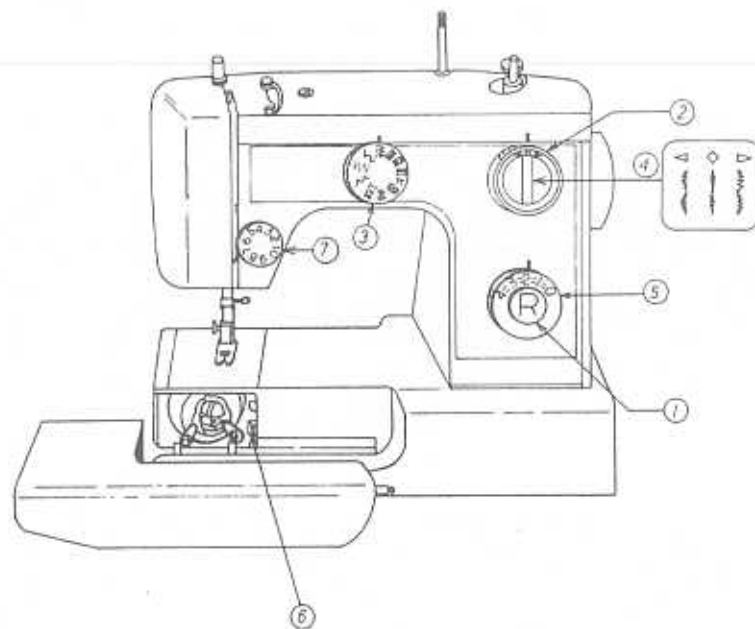


1. Lower needle down into fabric and raise presser foot, pivot the fabric around the needle to change direction as desired.



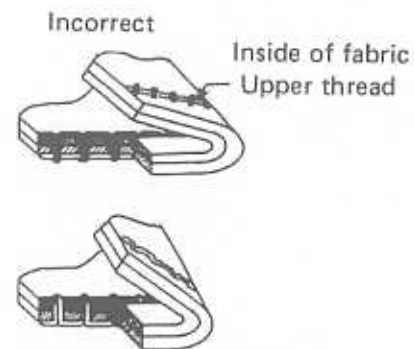
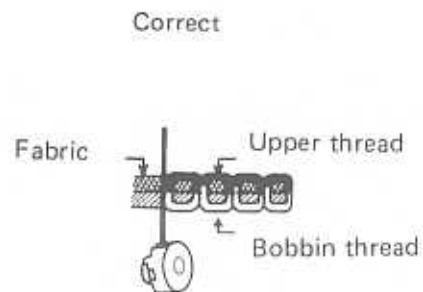
2. Pull out both threads and place them together under presser foot to the rear of machine.

CONTROL DIAL

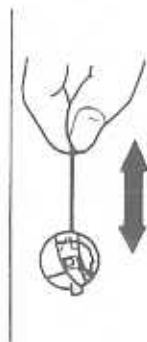


1. Reverse button
2. Zig-zag width dial
3. Pattern selector dial
4. Needle position knob
5. Stitch length dial
6. Drop feed lever
7. Thread tension dial

ADJUSTING THREAD TENSION

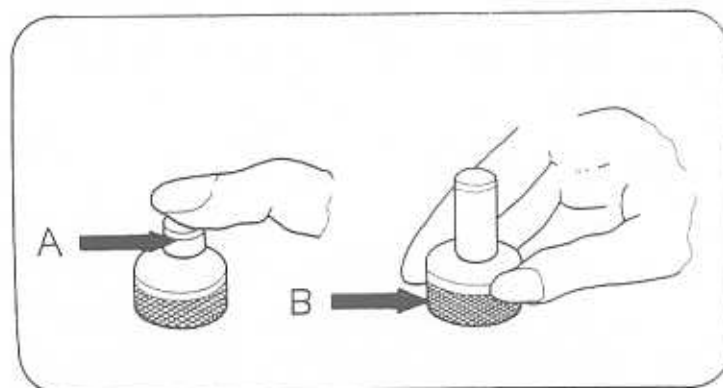


Upper thread tension may be adjusted by turning the thread tension dial.



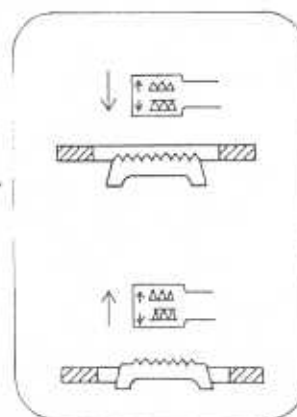
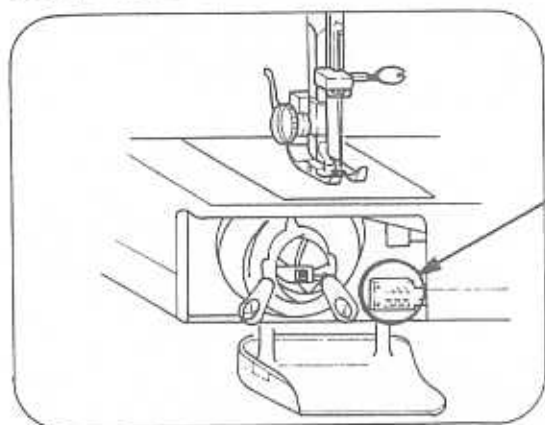
Lower thread tension can be adjusted by turning screw on bobbin case slightly to the right (clock-wise) to increase tension, (Anti-clockwise) to the left to decrease tension.

REGULATING THE PRESSER FOOT PRESSURE



1. Push down inner pin (A) to increase pressure. (Light to medium fabrics).
2. Push down outer ring to release pressure. (Heavy fabrics)
3. Insufficient pressure may cause poor feeding, skipped stitches, or difficulty in guiding the fabric.
4. No pressure adjustment is required when darning or sewing embroidery.

DROP FEED

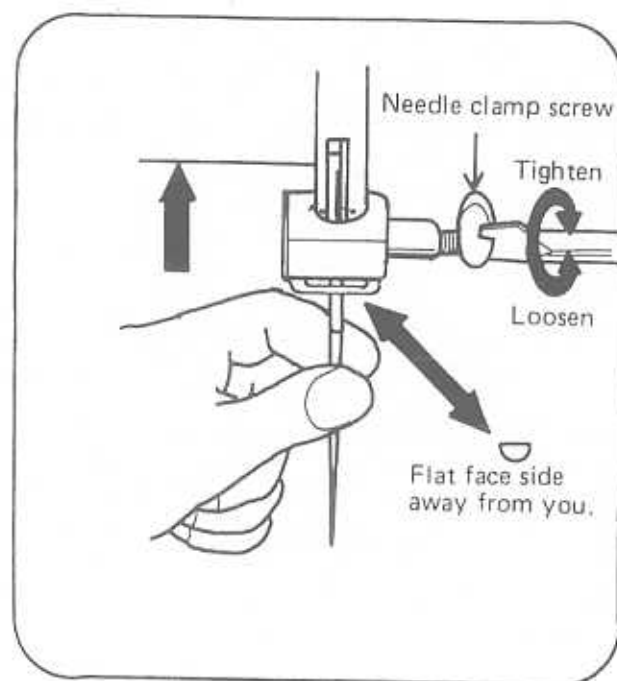


Lower feed dog by pushing lever, down in direction of arrow.
(No feeding of fabric)
Used when sewing on buttons, embroidery, etc.

For general sewing, raise height of feed dog by lifting lever in direction of arrow.

Normal sewing.
(Light, medium and heavy material)







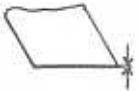





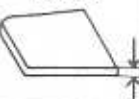


CHANGING NEEDLE



1. Raise needle to its highest position.
2. Loosen needle clamp screw and remove old needle.
3. With the flat side of the needle facing away from you, insert needle as far up as it will go.
4. Tighten the needle clamp screw securely.

FABRIC · THREAD · NEEDLE TABLE

Please note that the following list is a guide when sewing different fabrics.

	Fabric	Thread	Needle	Pressure of presser foot	Length of stitches		Indica- tion of tension
					ST.	ZZ.	
				 HA-1			
<div>Light</div> 	Nylon	80 Cotton	9		1-3	1-4	
	Tricot	60 S. Fiber					
	Silk	50 silk					
	Wool silk	50 S. Fiber Silk	11				
<div>Medium</div> 	Ging ham	60-80 Cotton	11-14		0.5 – 3	0.5 – 4	
	Thin Jersey	60 S. Fiber	11				
	Gabardine	50 Silk					
<div>Heavy</div> 	Denim	50 cotton	14-16		0.5 – 3	0.5 – 4	
	Jersey	50 S. Fiber	11-14				
	Tweed	50 Silk	11-14				

SEWING (PATTERN SELECTOR) AND OPERATION TABLE

	Operation Sewing way	Pattern	Needle position	Zig-zag width	Stitch length	Presser foot	Drop feed
1	Straight stitch						
2	Zig-zag						
3	Full auto zig-zag						
4	Super Zig-zag						
5	Button hole						
6	Twin needle	except button hole					
7	Embroidery					No NEED	

TO START SEWING

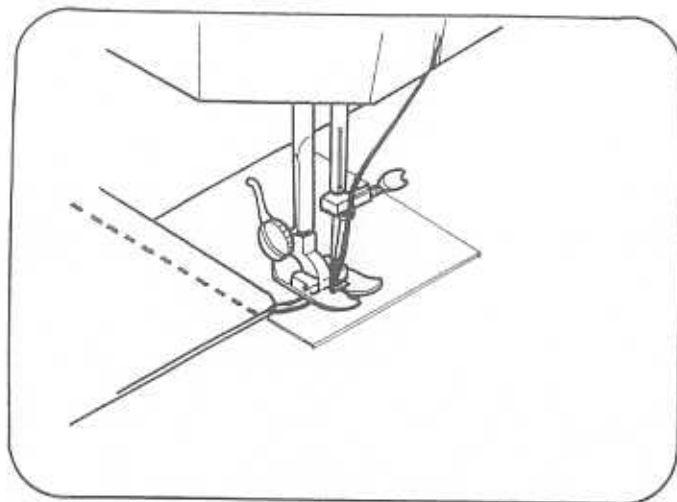
Important Hints.

1. Raise the take-up lever to its highest position when starting and stopping sewing.
2. Hold both threads about 10 cms to the rear of machine for the first two to three stitches.
3. Sufficient fabric should be placed under needle before lowering presser foot.
4. Depress foot/Speed control and start to sew.
5. Test the machine stitches on a scrap of fabric you plan to use, adjusting the machine for the length of stitch and tension suitable to your fabric.

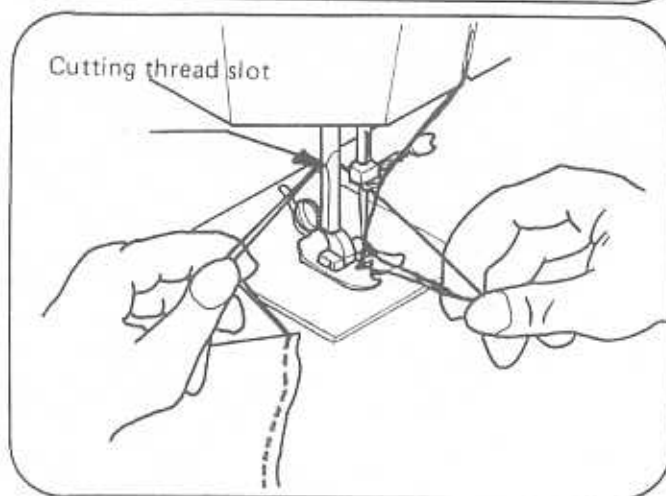
Attention.

1. When turning the hand wheel manually, always turn it toward you.
2. Guide the cloth gently with your hand.
3. To prevent breaking needle always stop with the needle out of the fabric.

TO FINISH SEAM



1. Sew to the edge of seam.
2. Push the reverse button and sew in reverse for about 3—4 cms.
3. Raise needle to its highest position.
4. Lift presser foot and pull out the fabric to rear of machine.



5. Cut threads as shown on the thread cutter.

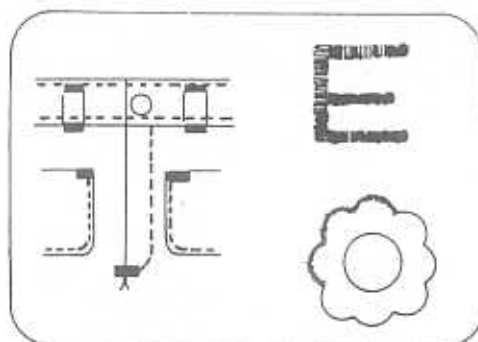
STRAIGHT STITCH

1. This type of stitching is the one used most frequently.
2. The zig-zag presser foot can be used for both straight and zig-zag sewing.
3. For sewing light fabric, use smaller stitch size and left needle position.
(Refer to page 15 for dial setting).

ZIGZAG SEWING

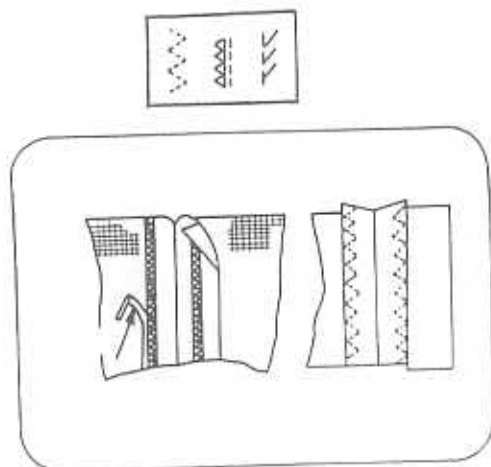


Pattern selector position

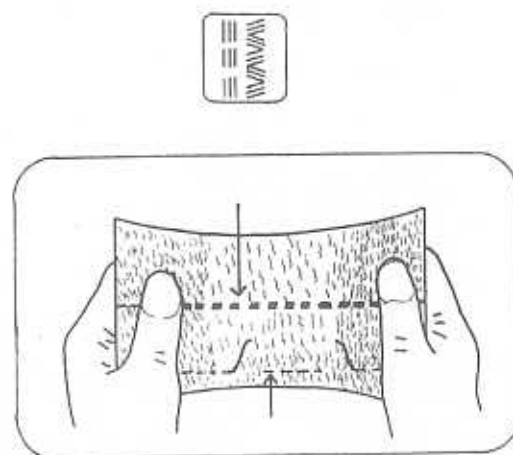


Satin stitching can be used for sewing initials, patterns, applique, etc.

OVERCASTING



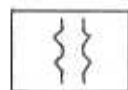
STRETCH STITCH



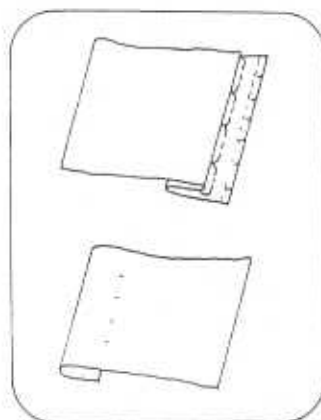
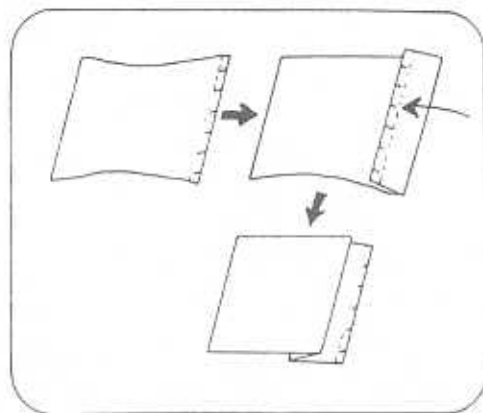
Use this stitch with knitted, tricot or other fabrics.

The stitch enables you to press open your seam as with any straight stitched seam, stretches with fabric without breaking the thread.

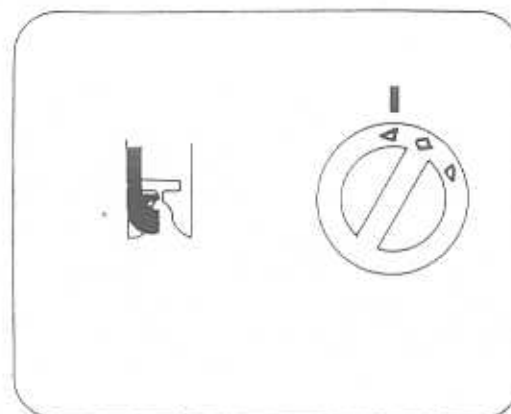
BLIND STITCH



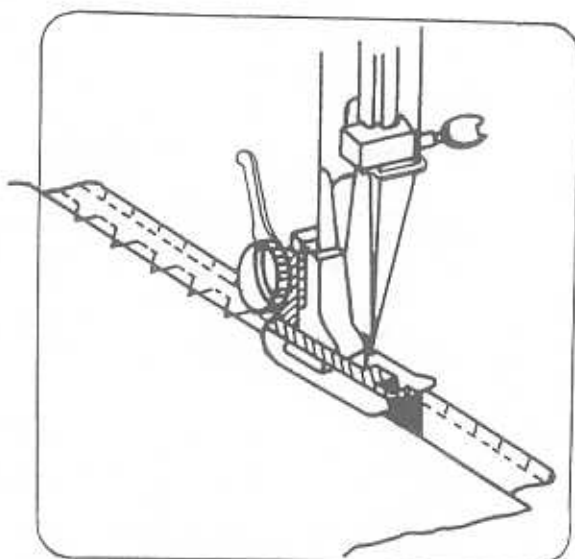
1. Fold fabric as shown.



2. Attach blind hem guide and select needle position.

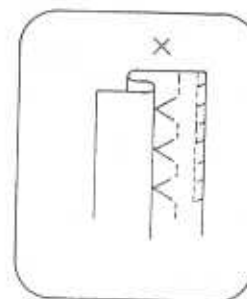


3. To finish seam as shown.



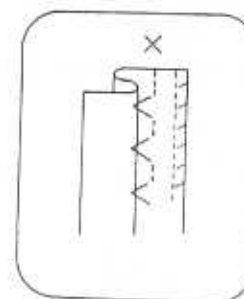
Adjust width and needle position to obtain correct seam.

Needle is not catching edge of fold at all.



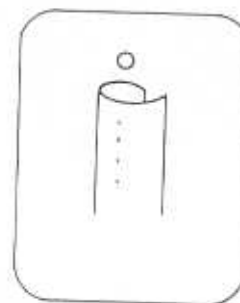
(A)

Needle is catching edge of fold too much.

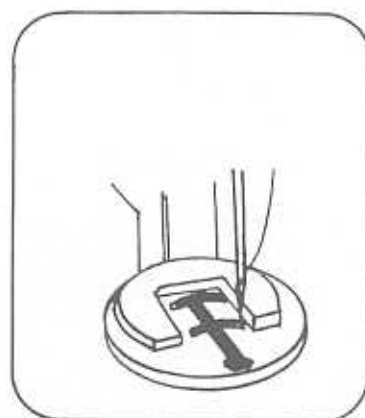
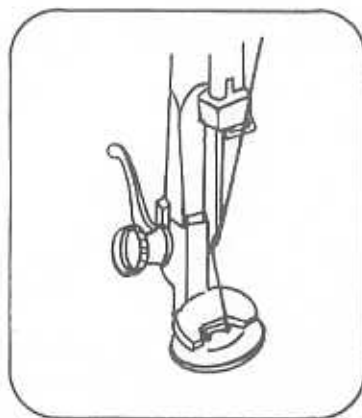


(B)

Correct seam.

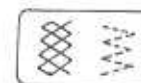
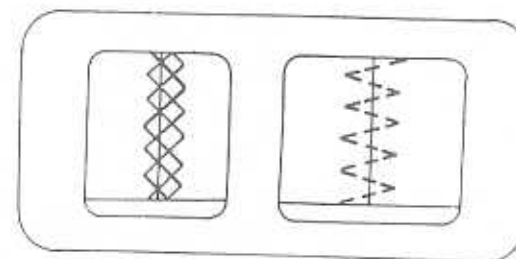


BUTTON SEWING



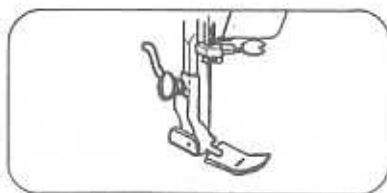
1. Set needle position to left and lower drop feed.
2. Use button presser foot and attach firmly.
3. Place button between presser foot and fabric and lower presser foot.
4. Manually turn hand wheel ensuring the needle enters into both holes of button without obstruction.
(Increase or decrease width setting).
5. Sew about 7 stitches.
6. Set zig-zag width to "0".
7. Sew a few stitches to fasten the stitch.
8. Remove fabric and cut off excess threads.

BINDING

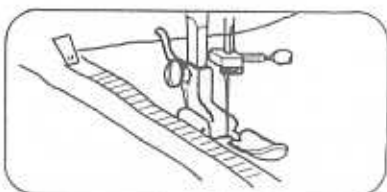


(Pattern selector dial position)

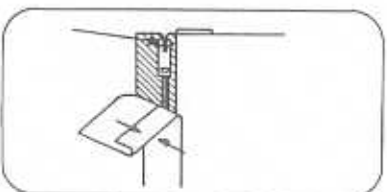
ZIPPER SEWING



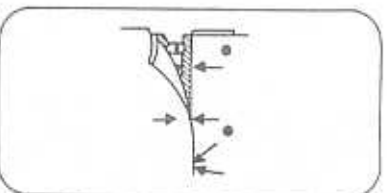
Raise the presser foot and raise the needle to its highest position by turning the hand wheel. Replace the foot with the zipper foot.



1. Fold the fabric about 2cm and place fabric under foot.
2. Zipper foot is designed to sew close to a raised edge preventing sewing on zipper.

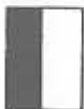









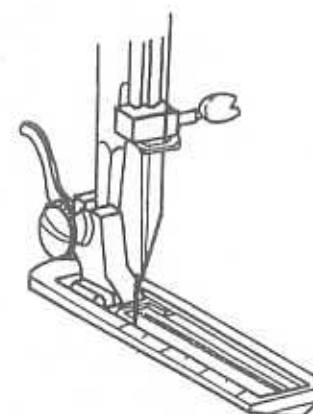
1. To sew the left side of the zipper, set the zipper foot on the left side of the needle.
2. To sew the right side of the zipper bring the foot to the right side of the needle.



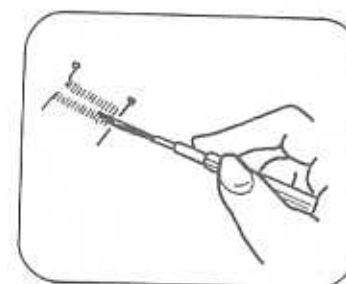
doing as shown.

BUTTON HOLE SEWING

Pattern selector dial	Steps	Settings
 1		<ol style="list-style-type: none"> 1. Set dial to "1" position. 2. Sew left side. 3. Raise the needle
 2		<ol style="list-style-type: none"> 4. Set dial to "2" position. 5. Sew 5-6 stitches. 6. Raise the needle
 3		<ol style="list-style-type: none"> 7. Set dial to "3" position. 8. Sew right side. 9. Raise the needle
 4		<ol style="list-style-type: none"> 10. Set dial to "4" position. 11. Sew 5-6 stitches. 12. Raise the needle

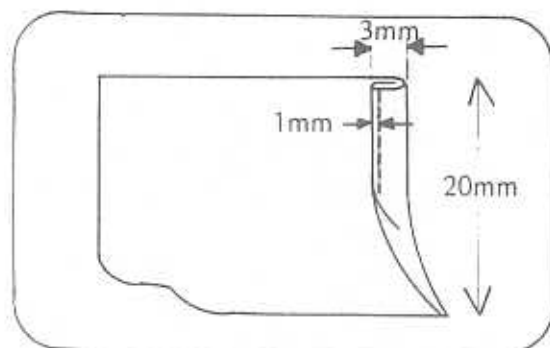


Before sewing set button-hole foot as shown.

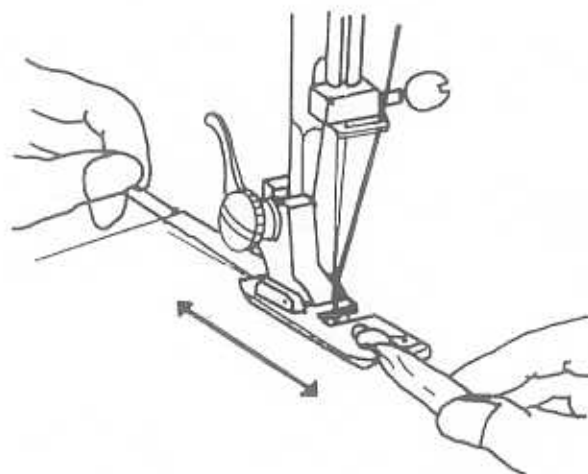


Cutting buttonhole along centre with cutter as shown and do not cut stitch.

HEMMING

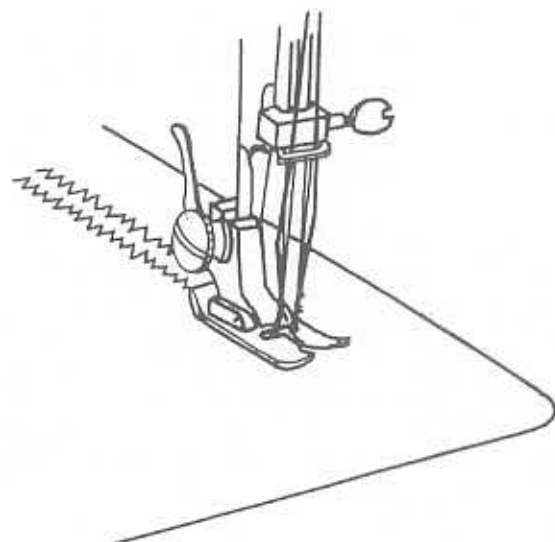


1. Raise the foot and the needle to its highest position. Replace the foot with the hemmer foot.
2. Fold over the fabric edge by about 3mm and place it under the foot. Secure the folded edge with a few stitches. Take out the workpiece and draw the hem into the hemmer foot by pulling the threads.



3. Lower the foot and sew the hem.
4. During sewing, fold the fabric to the left a little and allow it to run into the hemmer foot.
5. Make sure that the fabric does not move under the right half of the foot. The fabric must be fed into the scroll of the hemmer sufficiently so that the workpiece edge runs freely through the groove under the foot.

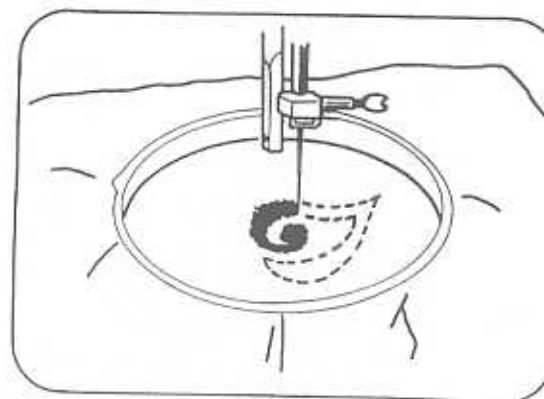
TWIN NEEDLE



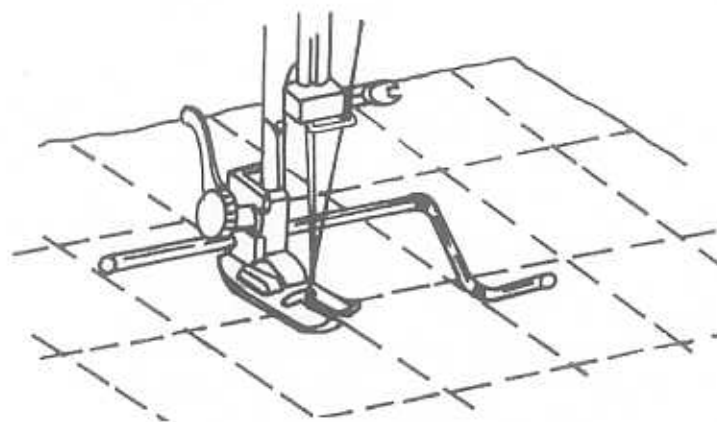
Thread machines as for normal sewing ensuring that use is made of the left and right needle bar guides.

NB. Sewing width should be between 0 and twin needle marked on zig-zag width dial, exceeding this will result in breaking of needles.

EMBROIDERY

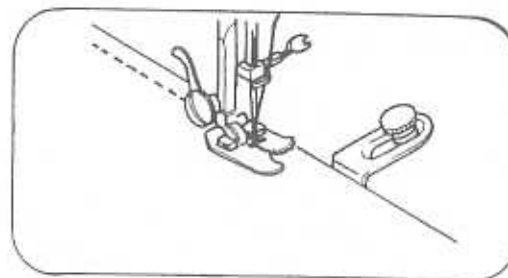


QUILTER



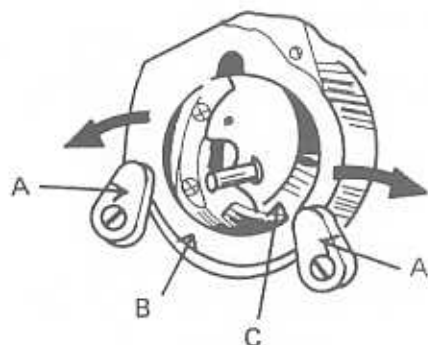
1. Insert supporter of quilter.
2. Move quilter and adjust stitch distance.

SEAM GUIDE



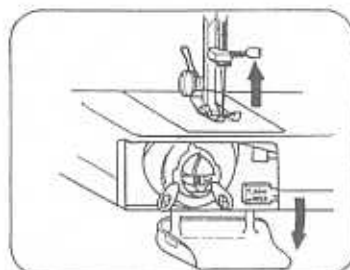
1. Use seam guide when sewing a long seam of regular distance from edge of material.
2. Set guide in hole on bed, at right of needle plate, and adjust distance.
3. Run machine with edge of material touching guide. Position cloth guide at an angle to sew a curved seam.

MAINTENANCE (CLEANING AND OILING)

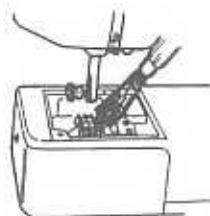


Cleaning shuttle race
(A) Latch knob
(B) Shuttle race cover
(C) Shuttle hook

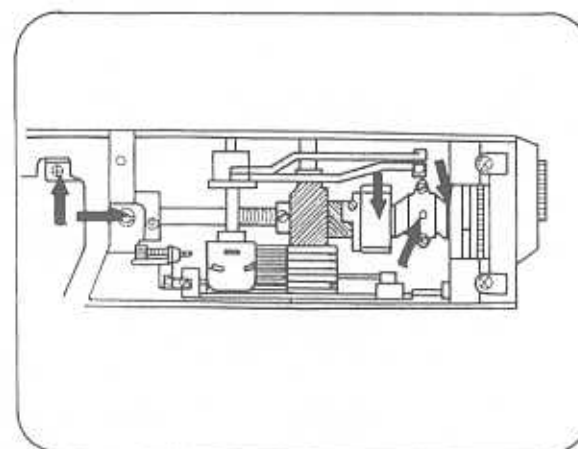
1. Raise needle to its highest position.
2. Take out bobin case.
3. Turn latch knob A as shown.
4. Take off shuttle race cover.
5. Take out shuttle hook.
6. Clean and oil shuttle race and hook, then replace in the reverse order.



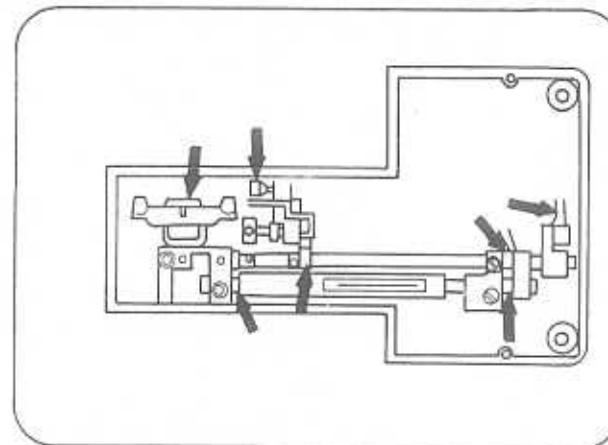
Open face cover and oil points indicated.



Cleaning feed dog



Open top cover and oil points indicated.



Oil points indicated on underside of bed base.

CHECKING PERFORMANCE PROBLEMS WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Fabric not moving	<ul style="list-style-type: none"> – Feed dog down. – Machine not moving. – Stitch length dial in 0 position. – Light pressure on presser foot. 	<ul style="list-style-type: none"> – Raise feed dog. – Moving stop motion. – Moving dial to 1-4. – Increase pressure on presser foot.
Breaking needles	<ul style="list-style-type: none"> – Incorrect setting of needle. – Needle bent. – Pulling fabric. – Incorrect needle & thread. 	<ul style="list-style-type: none"> – Reset needle. – Replace new needle. – Do not pull fabric. – Correct needle & thread.
The Upper Thread Breaks	<ul style="list-style-type: none"> – Incorrect position of zigzag width dial. – Improper threading. – Tight upper thread tension. – Needle bent. – Nicks or burrs on shuttle. 	<ul style="list-style-type: none"> – Move to correct position. – Rethread machine. – Loosen upper thread tension. – Replace new needle. – Replace shuttle, or polish off burrs completely.
The Lower Thread Breaks	<ul style="list-style-type: none"> – Tight bobbin thread tension. – Incorrect setting of needle. – Improper threading. – Dust and thread in shuttle. 	<ul style="list-style-type: none"> – Loosen bobbin thread tension. – Reset needle. – Rethread machine. – Clean shuttle.
Machine Jamming Knocking Noise	<ul style="list-style-type: none"> – No oil. – Dust and thread in shuttle. 	<ul style="list-style-type: none"> – Oil machine. – Clean shuttle.
Puckering	<ul style="list-style-type: none"> – Tension too tight. – Sewing foot pressure too strong. – Incorrect length 	<ul style="list-style-type: none"> – Reset. – Regulating sewing foot pressure. – Correct length (shorter).